## On a Collection of Reptiles and Amphibians from Perak, Malay Peninsula

By MALCOLM A. SMITH

(Plate IV)

The herpetological fauna of the Malay Peninsula is now pretty completely known, but that novelties can still be obtained there is shewn by a small collection of reptiles and amphibians made by Mr. M. W. F. TWEEDIE in Eastern Perak during March, 1933. The area visited by him lies on the borders of Kelantan, a densely forested mountainous district at the headwaters of the Plus River. It is one of the few places in the Peninsula not previously visited by a collector of reptiles.

The following species were obtained; all were found below 3,000 feet altitude.

Lizards.

Gymnoductylus marmoratus, Goniocephales belli, Aphaniotis fusca, Mubuyu mullifasciata, M. rugifera, and a single specimen of the rare Lygosoma butleri.

As I have shewn elsewhere (Fauna Brit, India, II, Lizards, Goniocephalus belli Dum. and Bib., 1837 is synonymous with G. bornecasis Schlegel 1848.

Snakes.

Lycodon subvinctus, Passerita prasina, Trimeresurus gramineus.

Amphibians.

A large series of Ichthyophis glutinosus and I. monochrous, mostly late larval forms; Megophrys nesuta and M. hassellii and a series of tadpoles of each; Bufo asper and some tadpoles of that toad shewing well the peculiar character of the lower lip; R. parvus; two examples of Phrynoglossus laevis, a rare frog in the Malay Peninsula; Rano laticeps; a single tadpole which I assign to Kana larutensis; and a new frog which I have pleasure in naming after its discoverer.

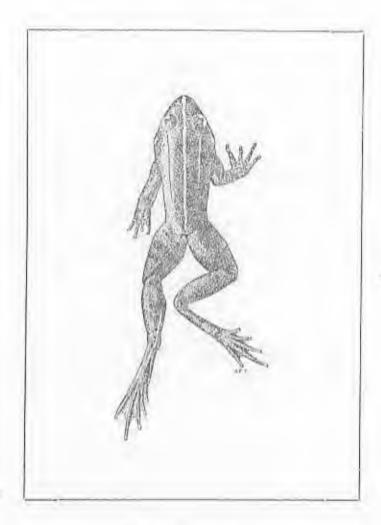


Fig. 1. Rana tweediei n. sp. Buccal cavity.

Rana tweediei, sp. nov. PLATE IV

Description of the type. Male, apparently fully grown, Brit. Mus. 1934. 5. 21. I. Type locality near the River Yum, Headwaters Plus River, alt. 2,000 feet.

Vomerine teeth well developed, in oblique groups commencing on a level with the choans and extending well behind them, about as far distant from the choans as from each other. Lower jaw with two well-developed tooth-like projections in front. Head not enlarged, moderately depressed, about as long as broad;



Rana tweediel nap.

shout obtusely pointed, projecting slightly beyond the lower jaw; cauthus rostralis feebly distinct; loreal region oblique, scarcely concave; nostril equidistant from the eye and the tip of the snout; distance between the nostrils a little greater than the interorbital width which is distinctly greater than the width of the upper cyclid; tympanum scarcely distinct, its diameter about half that of the eye.

Fingers swollen at the tips, but without horizontal groove between the upper and lower surfaces; first finger longer than second: subarticular tubercles large, prominent. Hind limb moderately long, the tibio-tarsal articulation reaching as far as the front of the eye; heels strongly overlapping when the limbs are folded at right angles to the body; tibia a little more than half the length of the head and body, longer than the fool; discs of toes a little larger than those of the fingers, also without horizontal groove; third toe much longer than fifth; toes threequarters webbed, the membrane extending to the discs of the third and fifth toes, but deeply emarginate; two phalanges of the fourth too free, but the web extending as a fringe to the disc: a fringe along the outer side of the fifth toe; a tarsal fold; inner metatarsal tubercle clongate, more than half the length of the first toe, no outer tubercle; outer metatarsals separated for half their length.

Skin of the upper parts almost quite smooth; a fine but quite distinct dorso-lateral fold starting from behind the upper eyelid and extending nearly to the level of the groin; supratympanic fold feebly distinct; some tubercles on the upper cyclid.

Purplish-brown in life above with a fine yellow vertebral stripe, and with a fine, more or less distinct, light line down the middle of each leg behind; whitish below, the throat spotted with dark brown; limbs with dark cross bars. No secondary sex characters.

From snout to vent, 37 mm.

Five juveniles, the largest measuring 22 mm. from snout to vent, do not differ much from the type. The dorso-lateral fold may be more distinct, and some have irregular glandules on the sides of the body; the tibio-tarsal articulation may reach as far as the nostril; a light bar may be present between the eyes, but none of them has the vertebral stripe or the light line down the hind limb.

Rana irecediei is most nearly related to R. laticeps which was also obtained in the same locality. It differs in having a fine glandular dorso-lateral fold and smoother skin, a narrower head and more pointed shout, a shorter hind limb and more extensive web to the toes, as well as in coloration. As with laticeps and its near ally kuhli, both the eyes and the nostrils in R. tweediei are placed well upon the upper surface of the head.